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2. (Amended Once) The apparatus according to claim 1, wherein the filaments completely surround the substrate to be coated.

3. (Once amended) The apparatus according to claim 2, wherein a suspension of the filaments matches the shape of the substrate to be coated.

4. (Once amended) The apparatus according to claim 3, wherein the filaments are spaced 1mm to 30mm from the substrate to be coated.

6. (Once amended) The apparatus according to claim 1, wherein the filaments are clamped at both ends thereof in holders arranged parallel with each other, and a curvature is formed by the dead weight of the filaments.

7. (Once amended) The apparatus according to claim 6, further comprising radiation screens arranged on the holders as a protection from heat loss.

8. (Once amended) The apparatus according to claim 6, wherein said holders have slots for flexibly clamping in filaments of different lengths.

9. (Once amended) The apparatus according to claim 7, wherein said holders have slots for flexibly clamping in filaments of different lengths.

10. (Once amended) The apparatus according to claim 1, wherein the filaments are arranged in two rows in concentric circles, so as to form an inner row of filaments and an outer row of filaments, the filaments of the inner row being arranged respectively in gaps between

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projections of the substrate and the filaments of the outer row being arranged proximate outer ends of the projections, in gaps between filaments in the inner row of filaments.

11. (Once amended) The apparatus according to claim 6, wherein said holders comprise filament retainers said filament retainers including a bevelled wall.

Please add the following new claims:

- - 16. (New) The apparatus of claim 1, wherein the apparatus includes an arrangement of filaments at least partially surrounding and conforming to a substrate having a complex outer surface, wherein the distance between the filaments and the substrate remains substantially the same.

17. (New) An apparatus for coating a substrate, the apparatus comprising:  
a pair of holders, each including a filament retainer, the holders being arranged parallel to each other and having a predetermined distance therebetween; and  
a number of filaments being clamped between said filament retainers of each of said pair of holders, said filaments having a length which is greater than said predetermined distance, such that said filaments form a trough for receiving the substrate to be coated.

18. (New) The apparatus of claim 17, further comprising at least one radiation screen mounted to at least one of said holders.

19. (New) The apparatus of claim 17, wherein said holders each include a power supply lead for receiving power to operate the apparatus.

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20. (New) The apparatus of claim 17, wherein the filaments are constructed from a high melting point metal.

21. (New) The apparatus of claim 20, wherein the filaments are constructed of molybdenum.

22. (New) An apparatus for coating a substrate by means of a chemical gas phase separation process, the apparatus comprising:

a plurality of filaments constructed and arranged to at least partially surround and conform to the outer surface of a substrate and to maintain a predetermined distance between each of the plurality of filaments and the substrate, wherein the plurality of filaments remain substantially equidistant to the outer surface of the substrate.

23. (New) The apparatus of claim 22, wherein the arrangement of the plurality of filaments are constructed and arranged to provide a homogeneous temperature distribution of the substrate and a homogeneous temperature distribution of an activated gas surrounding the substrate.

24. (New) An apparatus for coating a substrate by means of a chemical gas phase separation process, the apparatus comprising:

an arrangement of filaments constructed and arranged to provide a homogeneous temperature distribution of the substrate and a homogeneous temperature distribution of an activated gas surrounding the substrate.

25. (New) An apparatus for coating a substrate by means of a chemical gas phase separation process, the apparatus comprising:

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a first filament holder including a first clamp and a second filament holder including a second clamp, the first and second filament holders being spaced apart by a predetermined distance;

a plurality of filaments having first and second ends, each of the plurality of filaments having a length greater than the predetermined distance, the first end of each of the plurality of filaments being clamped in the first clamp and the second end of each of the plurality of filaments being clamped in the second clamp;

wherein the first and second filament holders substantially conform to an exterior surface of the substrate such that a homogeneous temperature distribution of the substrate and a homogeneous temperature distribution of an activated gas surrounding the substrate are provided.

26. (New) The apparatus of claim 25, wherein one of the first and second filament holders comprises a short circuiting ring.

27. (New) The apparatus of claim 25, wherein the distance between each filament and the outer surface of the substrate is substantially the same.

28. (New) The apparatus of claim 25, wherein each of the plurality of filaments are spaced apart substantially equidistantly from one another.

29. (New) The apparatus of claim 25, further comprising a radiation screen supported on at least one of the holders

30. (New) The apparatus of claim 25, wherein each holder includes a clamping means for clamping the ends of the plurality of filaments.

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31. (New) The apparatus of claim 25, wherein each clamping means includes a slot for receiving the filaments.

32. (New) The apparatus of claim 31, wherein the clamping means are constructed and arranged to receive filaments of different lengths.

33. (New) The apparatus of claim 25, wherein the distance between each filament and a surface of the substrate is substantially the same.

34. (New) The apparatus of claim 33, wherein the distance ranges from 1mm to 30mm.

35. (New) The apparatus of claim 34, wherein the plurality of filaments substantially conforming to a surface of the complex substrate.

36. (New) The apparatus of claim 25, wherein the first and second filament holders have an arcuate shape.

37. (New) The apparatus of claim 25, wherein the first filament holder is parallel to the second filament holder.

38. (New) The apparatus of claim 37, wherein the plurality of filaments are suspended between the first and second filament holder such that the weight of the plurality of filaments forms a suspended portion of the plurality of the filaments.

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39. (New) The apparatus of claim 38, wherein the suspended portion of the plurality of filaments at least partially surrounds and conforms to the outer surface of the complex substrate.

40. (New) The apparatus of claim 39, wherein each of the plurality of filaments are spaced apart substantially equidistantly from one another.

41. (New) An apparatus for coating a substrate by means of a chemical gas phase separation process, the apparatus comprising:

a first arcuate filament holder including a first clamp and a second arcuate filament holder including a second clamp, the first and second filament holders being spaced apart by a predetermined distance, one of the first and second filament holders comprising a short circuiting ring;

a radiation screen supported on at least one of the filament holders;

a plurality of filaments having first and second ends, each of the plurality of filaments having a length greater than the predetermined distance, the first end of each of the plurality of filaments being clamped in the first clamp and the second end of each of the plurality of filaments being clamped in the second clamp;

wherein the first and second clamps include a slot for receiving the plurality of filaments therein;

wherein each of the first and second holders is constructed and arranged to provide a homogeneous temperature distribution of the substrate and a homogeneous temperature distribution of an activated gas surrounding the substrate by substantially conforming to an outer surface of a complex substrate by providing substantially the same distance between each filament and the outer surface of the complex substrate.